

What is claimed is:

1. A liquid crystal display comprising:

5 a storage capacitor of a storage on common type formed in a storage capacitor region of a pixel region;

a storage capacitor lower electrode formed in the storage capacitor region;

a gate insulating layer formed on the storage capacitor lower electrode;

10 a passivation film formed on the gate insulating layer, the passivation film an inorganic insulating layer and an organic insulating layer stacked on the inorganic insulating layer in the pixel region but devoid of the organic insulating layer in the storage capacitor region; and

15 a pixel electrode formed on the passivation film and functioning as a storage capacitor upper electrode in the storage capacitor region.

2. The liquid crystal display according to claim 1,
20 wherein the pixel electrode formed in the vicinity of the storage capacitor region has a substantially 'U' shape when viewed from a cross-sectional viewpoint of the liquid crystal display.

3. The liquid crystal display according to claim 1, wherein the storage capacitor upper electrode is wider than the storage capacitor lower electrode.

5 4. A liquid crystal display comprising:

a storage capacitor of a storage on common type formed in a storage capacitor region of a pixel region;

a storage capacitor lower electrode formed in the storage capacitor region;

10 a gate insulating layer formed on the storage capacitor lower electrode;

a passivation film formed on the gate insulating layer, the passivation film containing an inorganic insulating layer and an organic insulating layer stacked on the inorganic insulating layer in the pixel region, the organic insulating layer being thinner in the storage capacitor region than in the remainder of the pixel region; and

15 a pixel electrode formed on the passivation film and functioning as a storage capacitor upper electrode in the storage capacitor region.

20 5. The liquid crystal display according to claim 4, wherein the pixel electrode formed in the vicinity of the storage

capacitor region has a substantially 'U' shape when viewed from a cross-sectional viewpoint of the liquid crystal display.

6. The liquid crystal display according to claim 4,
5 wherein the storage capacitor upper electrode is wider than the storage capacitor lower electrode.

7. A method of fabricating a liquid crystal display, the method comprising:

10 depositing a metal film on a substrate and patterning the deposited metal film to form a gate electrode in a transistor region and a storage capacitor lower electrode in a pixel region;

depositing a gate insulating layer;

15 sequentially depositing an intrinsic semiconductor layer and an impurity-doped semiconductor layer on the gate insulating layer and patterning the deposited intrinsic semiconductor layer and impurity-doped semiconductor layer to form an active layer and an ohmic contact layer in the transistor region;

20 depositing a metal layer and patterning the deposited metal film to form a source electrode and a drain electrode in the transistor region;

sequentially depositing an inorganic insulating layer and an organic insulating layer to form a passivation film;

performing a full exposure to define a contact hole over a drain region of the transistor region and a diffraction exposure over the storage capacitor lower electrode of the pixel region;

developing and etching to form the contact hole exposing the
5 drain electrode in the transistor region, and etching the passivation film on the storage capacitor lower electrode of the pixel region such that the passivation film has a predetermined thickness; and

depositing a transparent metal film and patterning the
10 deposited transparent metal film to form a pixel electrode functioning as a storage capacitor upper electrode.

8. The method according to claim 7, wherein the etching of the passivation film on the storage capacitor lower electrode of
15 the pixel region comprises completely removing the organic insulating layer from the passivation film.

9. The method according to claim 7, wherein the etching the passivation film on the storage capacitor lower electrode of
20 the pixel region comprises removing a portion of the organic insulating layer to form a passivation film that is thinner than the passivation film as deposited.

10. The method according to claim 7, further comprising selecting the organic insulating layer to be a photo-reactive organic insulating layer.

5 11. The method according to claim 7, further comprising forming the pixel electrode on the inorganic insulating layer in a substantially 'U' letter when viewed from a cross-sectional viewpoint of the liquid crystal display.

10 12. The fabrication method according to claim 7, further comprising forming the storage capacitor upper electrode wider than the storage capacitor lower electrode.

13. A liquid crystal display comprising a storage capacitor
15 formed in a storage capacitor region and a passivation film, the passivation film containing at least an inorganic insulating layer in the storage capacitor region and at least the inorganic insulating layer and an organic insulating layer in a region outside the storage capacitor region, the passivation film being
20 thinner in the storage capacitor region than in the region outside the storage capacitor region.

14. The liquid crystal display according to claim 13, wherein the organic insulating layer is thinner in the storage

capacitor region than in the region outside the storage capacitor region.

15. The liquid crystal display according to claim 13,
5 wherein the organic insulating layer is not present in the storage capacitor region.

16. The liquid crystal display according to claim 13,
wherein the storage capacitor further comprises a storage
10 capacitor upper electrode which is wider than a storage capacitor lower electrode.